This entire subject is one of the greatest importance to the systematic bryologist and the preceding suggestions only touch upon its fringe. Had its importance been recognized by earlier writers not only would the *Cleistoparpi* never have been treated as a separate group, but *Grimmia* and *Orthotrichum* would never have been put in the same family or *Homalothecium*, *Pylaisia*, *Orthothecium* and *Entodon* been closely associated.

Sometime later I hope to be able to add to the above suggestions and to give an extensive list of species confirming these suggestions, together with such exceptions as I can find.

October, 1908. Brooklyn, New York.

ASA GRAY.

November 18, 1810—January 30, 1885.

The portrait herewith presented marks the recent publication of the seventh edition of the long familiar "Gray's New Manual of Botany." This volume is illustrated, some groups more fully than others, and rearranged to follow in large part that of Engler and Prantl, but it is still in all essentials the beloved book of our youthful days. It is edited by Benjamin Lincoln Robinson, Asa Gray Professor of Systematic Botany at Harvard University, and Merritt Lyndon Fernald, Assistant Professor in the same University, and published by the American Book Co.

We had hoped to have a biographical sketch to offer at this time but our space is full and we can only refer our readers to the interesting account given by Walter Deane of the life and death of this "venerable Priest" of Botany, in the Bulletin of the Torrey Botanical Club, Vol. XV., No. 3, March, 1888, from which number our plate is reproduced.

A PRELIMINARY LIST OF HEPATICS FOUND IN THE VICINITY OF BALTIMORE.

CHARLES C. PLITT.

Ricciaceae.

1. *Riccia fluitans* L. (terrestrial form).
In early spring, after the snows and ice have disappeared, and the streams are beginning to subside, this pretty little hepatic will be found appearing in great numbers upon areas of the alluvial soil along the river, sometimes, too, extending into the cultivated fields, some distance from its banks.

Marchantiaceae.

2. *Reboulia hemisphaerica* (L.) Raddi.
This is a fairly common hepatic in our limestone regions. I had become so accustomed to seeing it only in such regions, that I was very much surprised to find it once in a shady spot along a roadside in our Coastal Plain.

3. *Conocephalum conicum* (L.) Dumort.
This is possibly our most conspicuous as well as common hepatic. The large patches formed by its wide ribbon-like thallus, covering moist shady banks, where it grows, are sure to attract attention. Notwithstanding that it is so very common, I have never found it in fruit. I have found it only in the Piedmont region.
4. *Lunularia cruciata* (L.) Dumort.
This neat little hepatic is almost sure to be found in any old greenhouse, growing on the soil, generally among the ferns.
5. *Marchantia polymorpha* L.
Another very common hepatic, but rather erratic in its behavior, found sometimes for years in a certain locality, only to suddenly disappear. Almost sure to be found on the hillside of any newly-cut road, especially if such a road goes through moist wooded regions. It, however, does not seem to be over particular in its choice of habitat. I have found it growing on old ash heaps, on the pavements of our city streets, and even in the bed of a shallow stream.

Metzgeriaceae.

6. *Riccardia latifrons* Lindb.
Rather rare, at any rate I have found it but once on a wet decaying log in a deep ravine in the Piedmont region.
7. *Metzgeria conjugata* Lindb.
Not at all uncommon on shaded rocks in deep woods. Found thus far only in the Piedmont region.
8. *Pallavicinia Lyellii* (Hook.) S. F. Gray.
Very common, growing over mosses in swampy woods in our Coastal Plain.
9. *Pellia epiphylla* (L.) Corda.
Another common hepatic, found growing on the ground in moist places of our Coastal Plain. I have found it also, but less frequently, in springy places among the wet rocks in the Piedmont region.
10. *Blasia pusilla* L.
Another fairly common hepatic, sometimes covering large areas. Found in situations similar to those in which *Marchantia* is frequently found. An interesting companion plant is *Anthoceros laevis*. In fact, wherever I find *Blasia*, I am sure of finding *Anthoceros*.

Jungermanniaceae.

11. *Nardia crenulata* (Smith) Lindb.
On earth among rocks in bed of a brook coming down steep hillside. Rather rare.
12. *Nardia obovata* (Nees) Lindb.
Rare. Found at the base of a large over-hanging rock, on moist earth, in Piedmont region.
13. *Plagiochila asplenioides* (L.) Dumort.
On dripping rocks and around the base of trees in swampy ground

There is a marked difference between the form found on the wet rocks of our Piedmont region, and the form found in the swampy ground of our Coastal Plain. The one being true *asplenioides* and the other, no doubt, the form *spinulosa* Dumort. This marked difference, however, is only noticeable when specimens are fresh and growing.

14. *Lophocolea heterophylla* (Schrad.) Dumort.
On ground over mosses, in low woods on the banks of our Coastal Plain rivers. Common.

15. *Chiloscyphus polyanthos* var. *rivularis* (Schrad.) Nees.
Fairly common in wooded swamps in the Coastal Plain, growing over mosses.

16. *Geocalyx graveolens* (Schrad.) Nees.
In localities similar to those in which *Lophocolea* is found, and equally common.

17. *Cephalozia connivens* (Dicks.) Lindb.
In wet thickets on the ground.

18. *Cephalozia curvifolia* (Dicks.) Dumort.
On decaying logs—watersoaked logs.

19. *Cephalozia serriflora* Lindb.
On decaying fallen tree trunks, frequently with *C. curvifolia* and other hepatics. When thus mixed *C. curvifolia* shows out beautifully in red brown, and *C. serriflora* in green.

20. *Odontoschisma denudatum* (Mart.) Dumort.
On decaying logs, in Coastal Plain woods.

21. *Odontoschisma prostratum* (Swartz) Trevis.
Over mosses in Coastal Plain swamps. Very common. I have mistaken this for *Nardia crenulata*, but have now learned that *Nardia* has marginal cells more pronounced, and is only about half the size of *Odontoschisma.*

22. *Calypogeia Trichomanis* (L.) Corda.
Very common, on the ground, over mosses and on decaying tree trunks.

23. *Bazzania trilobata* (L.) S. F. Gray.
Another common, but very pretty hepatic. Found, thus far, only in the Coastal Plain where it grows over mosses, where it is found in moist places or on wet rotting logs.

24. *Lepidozia sylvatica* Evans.
Found with *Cephalozia curvifolia.*

25. *Ptilidium pulcherrimum* (Web.) Hampe.
On fallen decaying tree trunks, found on the rocky hillsides of ravines in the Piedmont region. It does not seem to be very common.

26. *Trichocolea tomentella* (Ehrh.) Dumort.
This pretty hepatic is found growing over mosses in swampy places. It is common and is found as frequently in Piedmont region as in the Coastal Plain.

27. *Diplophylleia apiculata* Evans.
On earth among rocks, in bed of brook coming down steep hilly places; nearly always with *Scapania nemorosa.*

28. *Scapania nemorosa* (L.) Dumort.
This is quite common, on soil among rocks in moist places and on the ground. In former places, I find *Diplophylleia apiculata* frequently with it. The two plants are readily separated, for even the beginner will observe that whereas *Scapania nemorosa* is ciliated, *Diplophylleia* is not. I find gemmiferous specimens during latter part of August.

29. *Radula complanata* (L.) Dumort.
Fairly common on rocks in Piedmont region.

30. *Porella pinnata* L.
Very common, found on rocks frequently submerged, in brooks of our Piedmont region. When wet it presents a most beautiful appearance.

31. *Porella platyphylla* (L.) Lindb.
Very common on rocks and on the trunks of trees. Found here most frequently on rocks in the Piedmont region.

32. *Leucolejeunea unciloba* (Lindenb.) Evans.
Found on rocks and on tree trunks especially those of *Ilex opaca.* In the Coastal Plain, I find it on trees, and in the Piedmont region generally on rocks.

33. *Jubula pennsylvanica* (Steph.) Evans.
In moist places on rocks or on the ground. Rather rare.

34. *Frullania Asagrayana* Mont.
Very common, on trees and on rocks. Here it is most frequently found on the bark of *Kalmia latifolia*, especially those old plants found on the slopes of our deep shady ravines.

35. *Frullania Brittoniae* Evans.
Not at all common, found thus far only on rocks in the Piedmont region.

36. *Frullania Eboracensis* Gottsche.
More or less common, found generally on smooth-bark trees, upon which it makes some of the prettiest tracings.

37. *Frullania plana* Sulliv.
Found but once, but then in the greatest profusion on shaded rocks overlooking a river, in Piedmont region.

Anthocerotaceae.

38. *Anthoceros laevis* L.
This is quite common, and is likely to be found in almost any wet springy place in the Piedmont region.

Besides the seventeen species with numbers bold faced in the above list, Ward mentions also the following as found near Washington, D. C., in his Check List:

Riccia lutescens Schwein.
Metzgeria myriopoda Lindb.
Blepharostoma trichophyllum (L.) Dumort.
Jamesoniella autumnalis (DC.) Steph.
Microlejeunea lucens (Tayl.) Evans.
Lophocolea bidentata Dumort.
Lepidozia reptans (L.) Dumort.
Lepidozia setacea (Web.) Mitt.*
Ptilidium ciliare (L.) Nees.**
Anthoceros punctatus L.

*(Probably *L. sylvatica* Evans).
**(Probably *P. pulcherrimum* (Web.) Hampe). Notes are on authority of Miss Haynes.

Besides these, many of which will in all probability be found also in this vicinity, I have a specimen of *Asterella tenella* (L.) Beauv. collected by Miss Mary F. Miller at Great Falls. This, too, is likely to be found here.

Examining the list of 38 species, as given, we will note the following: That 15 species or more than one-third, are found only in the Piedmont region; 11 species only in the Coastal Plain; 11 species in either, and 1, *Lunularia cruciata*, only in greenhouses. Of the 11 species found in either Coastal Plain or Piedmont region, 6 are found most frequently in the Piedmont, and 1 most frequently in the Coastal Plain, leaving 4 that are found equally common in either region.

This would seem to show, that of the 38 species, 16 of them may be found in the Coastal Plain; but in the Piedmont region, with its greater diversity of soils and conditions, 25 or more than one-half again as many species are to be found.

Species found only in the Piedmont region:

1. *Riccia fluitans.*
2. *Conocephalum conicum.*
3. *Riccardia latifrons.*
4. *Metzgeria conjugata.*
5. *Blasia pusilla,*
6. *Nardia crenulata.*
7. *Nardia obovata.*
8. *Ptilidium pulcherrimum.*
9. *Diplophylleia apiculata.*
10. *Radula complanata.*
11. *Porella pinnata.*
12. *Jubula pennsylvanica.*
13. *Frullania Brittoniae.*
14. *Frullania plana.*
15. *Anthoceros laevis.*

Species found only in the Coastal Plain:

1. *Pallavicinia Lyellii*
2. *Lophocolea heterophylla.*
3. *Chiloscyphus polyanthus rivularis.*
4. *Geocalyx graveolens.*
5. *Cephalozia connivens.*
6. *Cephalozia curvifolia.*
7. *Cephalozia serriflora.*
8. *Odontoschisma denudatum.*
9. *Odontoschisma prostratum.*
10. *Bazzania trilobata.*
11. *Lepidozia sylvatica.*

Species found in either region, but preferring the Piedmont:

1. *Reboulia hemisphaerica.*
2. *Marchantia polymorpha*
3. *Scapania nemorosa.*
4. *Porella platyphylla.*
5. *Frullania Asagrayana.*
6. *Frullania Eboracensis.*

Species found in either region, but preferring the Coastal Plain:

1. *Pellia epiphylla.*

Species equally at home in either region:

1. *Plagiochila asplenioides.*
2. *Calypogeia Trichomanes.*
3. *Trichocolea tomentella.*
4. *Leucolejeunea unciloba.*

In concluding, allow me to state that my thanks are due Miss Caroline C. Haynes, not only for her determinations and verifications of specimens, but now also for kindly rearranging their names according to Engler and Prantl.

Baltimore, Maryland.